

## Applications:

- Microwave and Millimeter Receivers
- Instrumentations
- Test Bench

## Features:

- State-of-the-art Solid State Packaging Technologies
- Various Bandwidth Coverage
- Very Low Noise Figure
- Linear gain of 10 to 60 dB
- Coax RF connectors up to 67 GHz
- 8 Waveguide Sizes up to 110 GHz



## Descriptions:

**3J Microwave, Inc.** offers a complete line of low noise amplifier in frequency range of 2 to 110 GHz. The available state-of-the-art solid-state devices, technology & packaging techniques are utilized in the low noise amplifier series to ensure the cutting edge performance achieved. Coax RF connectors are available in the frequency range of 67 GHz and below. Waveguide connectors are also designed to

cover eight waveguide bands from K to W-Band in frequency range of 18 to 110 GHz. The series low noise amplifiers are designed for the various applications such as receivers, bench test & instrumentations etc. The low noise amplifiers are sorted in the following two categories: 1) **LNAC** series coaxial low noise amplifiers; 2) **LNA** series waveguide amplifiers.

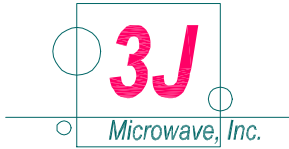
## LNAC Series Coax LNA Specifications:

Model Number***	Freq (GHz)	Bandwidth** (GHz)	NF (dB)	Gain (dB)	Output P1dB (dBm)	DC Bias* (V/mA)	RF Connector	Outline
LNAC-xxxxxxxx-00	1-27	2 to 26	2.0	10-50	+13.0	+8/30-200	SMA	Page 1-7
	1-40	2 to 39	2.5		+12.0		2.92 mm	
	1-50	2 to 49	3.5		+10.0		2.40 mm	
	1-67	2 to 66	5.0		+5.0		1.85 mm	

\* The Bias Voltage and Current may vary depending on the specifications

\*\* The bandwidth may vary depending on the specific center frequencies, P1dB and Psat

\*\*\* Please see "how to order" for the model number details

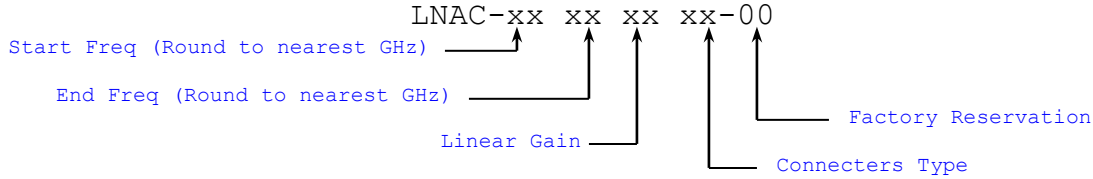


# Section 1-1: Low Noise Amplifier Series

[www.3jmicrowave.com](http://www.3jmicrowave.com)

Frequency Coverage: 2 to 110 GHz

## How to Order:



Connector Type	SMA		2.92		2.4		1.85	
	Male	Female	Male	Female	Male	Female	Male	Female
Designation	SM	SF	KM	KF	2M	2F	VM	VF

## Model Number Example:

Model Number of a 50 dB Gain Coax Low noise Amplifier with 2.92 mm Female Connectors at Frequency Range of 1 to 40 GHz:

**LNAC-014050KF-00**

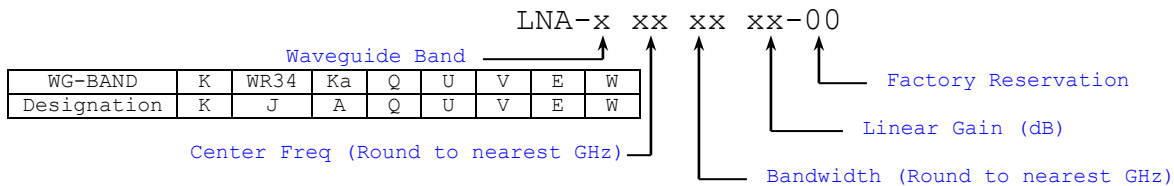
## LNA Series Waveguide LNA Specifications:

Model Number**	Freq (GHz)	Bandwidth (GHz)	NF (dB)	Gain (dB)	Output P1dB (dBm)	DC Bias* (V/ma)	RF Connector	Outline
LNA-xxxxxxx-00	18-27	2 to 9	1.5	10-50	+13	+8/30-200	Coax, UG595-U	Page 1-7 To
	22-33	2 to 11	2.0		+13		Coax, UG595-U	
	26-40	2 to 14	2.0		+13		Coax, UG599-U	Page 1-9
	33-50	3 to 17	3.0		+10		Coax, UG383-U	
	40-60	3 to 20	3.5		+10		Coax, UG383-U	
	50-75	5 to 25	4.5		+10		Coax, UG385-U	
	60-90	5 to 30	5.0		0		UG385-U	
	75-110	5 to 35	5.5		-3		UG387-UM	

\* The Bias Voltage and Current may vary depending on the specifications

\*\* Please see "how to order" for the model number details

## How to Order:



WG-BAND	K	WR34	Ka	Q	U	V	E	W
Designation	K	J	A	Q	U	V	E	W

For 100-109 GHz: B0-B9

For 110-119 GHz: H0-H9

## Model Number Example:

Model Number of a W-Band Waveguide Low noise Amplifier at 94 ± 5 GHz with 30 dB Gain:

**LNA-W941030-00**